

From: Matthew McConnell
To: rick.garner@pgnmail.com
Date: 9/24/02 4:01PM
Subject: Request for Additional Information

Rick,

Attached you will find the questions that the NRC staff has generated during its review of the proposed addition of methodology references to the core operating limits for the Shearon Harris Nuclear Power Plant. Please let me know whether you would like to schedule a conference call with the technical staff for clarification of the attached questions. If a conference call is desired, please inform me of a date and time that is convenient to you.

Thanks,

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Attachment

Question for Harris on Addition of Methodology References to Core Operating Limits Report

1. The NRC's safety evaluation of Topical Report EMF-2328(P)(A), Revision 0, "PWR Small Break LOCA Evaluation Model, S-RELAP5 Based" states a condition on the use of ANF-RELAP code that still applies to the use of S-RELAP5. The statement is:

"That while it has been shown in Reference 53 [Loomis, G.G., "Summary of the Semiscale Program (1965-1986)," NUREG/CR-4945, July 1987] that the thermal-hydraulic phenomena observed for breaks up to 10 percent of the cold leg flow area are the same, if the code is used for break sizes larger than 10 percent of the cold leg flow area additional assessments must be performed to ensure that the code is predicting the important phenomena which may occur."

Your submittal did not state the break size range for which you intend to use the code. Please provide information that says what break size range you intend to use the code for, and if you intend to use the code for breaks larger than 10 percent of the cold leg flow area, also provide the required additional assessments.

2. The NRC's safety evaluation of Topical Report EMF-2310(P)(A), Revision 0, "SRP Chapter 15 Non-LOCA Methodology for Pressurized Water Reactors" states in Section 5.0 "Evaluation of S-RELAP5:"

"The staff notes, however, that a generic topical report describing a code such as S-RELAP5 cannot provide full justification for each specific individual plant application. The individual applicant must still provide justification for the specific application of the code which is expected to include as a minimum, the nodalization, defense of the chosen parameters, any needed sensitivity studies, justification of the conservative nature of the input parameters, and calculated results."

Your submittal did not include any justification of your specific application of the code. Please provide the necessary information.

3. The NRC's safety evaluation of Topical Report EMF-2310(P)(A), Revision 0, "SRP Chapter 15 Non-LOCA Methodology for Pressurized Water Reactors" states "The application to use S-RELAP5 is a replacement for the NRC approved code ANF-RELAP." Explain why you are not removing the methodology ANF-89-151(P)(A), "ANF-RELAP Methodology for Pressurized Water Reactors: Analysis of Non-LOCA Chapter 15 Events" from TS 6.9.1.6.2.
4. Topical Report EMF-2310(P)(A), Revision 0, "PWR Small Break LOCA Evaluation Model, S-RELAP5 Based" considers the new methodology as "an evolutionary outgrowth of SPC's existing methodology," where the existing methodology refers to XN-NF-82-49(P)(A) "Exxon Nuclear Company Evaluation Model Revised EXEM PWR Small Break Model." Explain why you are not removing XN-NF-82-49(P)(A) from TS 6.9.1.6.2.